5,776,760

71

We claim:

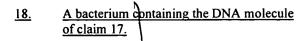
1. An isolated double-stranded DNA molecule which hybridizes to the DNA sequence of SEQ ID NO:3, wherein said DNA molecule encodes a glyphosate oxidoreductase enzyme.

but as

2. A recombinant bacterium containing the double-straded DNA molecule of claim 1.

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	<u>3.</u>	The DNA molecule of claim 1, wherein said DNA molecule comprises SEQ ID NO:17.
Sulaz	<u>4.</u>	A DNA molecule comprising SEQ ID NO:4.
	<u>5.</u>	An isolated DNA molecule that is capable of hybridizing to the DNA sequence of SEQ ID NO:4, whereis said DNA molecule encodes a glyphosate oxdoreductase enzyme.
	<u>6.</u>	A bacterium containing the DNA molecule of claim 5.
Sul a3	<u>7.</u>	A DNA molecule comprising SEQ ID NO:6.
,	<u>8.</u>	An isolated DNA molecule that is capable of hybridizing to the DNA sequence of SEQ ID NO:6, wherein said DNA molecule encodes a glyphosate oxidoreductase enzyme.
	<u>9.</u>	A bacterium comaining the DNA molecule of claim 8.
swa4	<u>10.</u>	A DNA molecule comprising SEQ ID NO:7.
	<u>11.</u>	An isolated DNA molecule that is capable of hybridizing to the DNA sequence of SEQ ID NO:7, wherein said DNA molecule encodes a glyphosate oxidoreductase enzyme.
	<u>12.</u>	A bacterium containing the DNA molecule of claim 11.
lul a5	<u>13.</u>	A DNA molecule comprising SEQ ID NO:8.
	<u>14.</u>	An isolated DNA molecule that is capable of hybridizing to the DNA sequence of SEQ ID NO:8, wherein said DNA molecule encodes a glyphosate oxidoreductase enzyme.
	<u>15.</u>	A bacterium containing the DNA molecule of claim 14.
Sul ales	<u>16.</u>	A DNA molecule comprising SEQ ID NO:13
	<u>17.</u>	An isolated DNA molecule that is capable of hybridizing to the DNA sequence of SEQ ID NO:17, wherein haid DNA molecule encodes a glyphosate oxidoreductase enzyme.



- 19. A method for selecting transformed plant cells comprising:
 - (a) introducing a chimeric gene comprising SEQ ID NO:3, 4, 6, 7, 8 or 17 into plant cells;
 - (b) placing said plant cells on a plant growth media containing glyphosate; and
 - (c) selecting plant cells that exhibit growth on said glyphosate containing media.
- 20. A method for selecting transformed plant cells comprising:
 - cells comprising:

 (a) introducing a chimeric gene
 comprising a DNA molecule
 encoding a glyphosate
 oxidereductase enzyme into plant
 dells, wherein the DNA molecule is
 capable of hybridizing to SEQ ID
 NO:3, 4, 6, 7, 8 or 17;
 - (b) placing said plant cells on a plant growth media containing glyphosate; and
 - (c) selecting plant cells that exhibit growth on said glyphosate containing media.